

What is Claimed is:

1. An anode with a 2450MHz resonance frequency comprising:  
a cylindrical anode body with an inside diameter in a range of 32.5 to 34.0mm;  
a total of ten vanes fitted to an inside circumferential surface of the anode body in a

5 radial direction; and

an inner strap and an outer strap provided to both of an upper surface and a lower surface of each vane, a distance of the inner strap and the outer strap being in a range of 0.8 to 1.2mm, and each of the inner strap and outer strap being in contact with every second vanes for electrical connection of the vanes alternately.

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2. The anode as claimed in claim 1, wherein the anode body and vanes are formed as one unit for simplification of a fabrication process.

15 3. The anode as claimed in claim 1, wherein the anode body and vanes have the same thickness.

4. A magnetron with an energy efficiency of higher than 70% comprising:  
an anode with a 2450MHz resonance frequency including;  
a cylindrical anode body with an inside diameter ranging 32.5 ~ 34.0mm, a total of ten vanes fitted to an inside circumferential surface of the anode body in a radial direction, and an inner strap and an outer strap provided to both of an upper surface and a lower surface of the vanes, a distance of the inner strap and the outer strap being in a range of 0.8 to 1.2mm, and each of the inner strap and the outer strap being in contact with every second vanes for

electrical connection of the vanes alternately;

an antenna attached to one of the vanes for transmitting a high frequency energy generated at the anode body to an exterior; and

a helical filament in an inner central part of the anode.

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5. The magnetron as claimed in claim 4, wherein the anode body and vanes are formed as one unit for simplification of a fabrication process.

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6. The magnetron as claimed in claim 4, wherein the anode body and vanes have the

10 same thickness.